

Common Poisonous Weed and Invasive Plant Species in Florida Residential Landscapes¹

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Introduction

The flora of Florida is highly diverse due to a subtropical climate that supports a vast number of plant species that are highly useful and beneficial as food, fiber, or ornamentals, or for the ecosystem services they provide. Unfortunately, the Florida climate is also conducive to supporting the growth and spread of numerous invasive plant species and weeds that can become problematic in home landscapes. Homeowners are typically aware or soon learn of the damage that can result from keeping invasive plants in a landscape and may have experience with weeds becoming a nuisance in their home garden or lawn. However, for homeowners who have small children, pets, or even livestock such as horses or sheep, they should also be aware that certain invasive plants and weeds can be toxic if consumed.

Just because a plant has some toxic properties does not mean that it shouldn't be used or that it must be removed—many common ornamentals and native plants can be toxic but still provide numerous benefits such as food or cover for wildlife, pollinator habitat and food sources, or aesthetic appeal. The key is to be informed and know which species are toxic to prevent accidental exposure, especially when small children or pets could be inadvertently exposed. This EDIS publication is intended to inform home gardeners, pest management professionals, and other plant enthusiasts of some of the most common poisonous invasive plants or weed species common in home landscapes in Florida, with particular focus on species that could potentially cause harm if ingested.

Common Pokeweed (*Phytolacca americana*)

Other Common Names

American pokeweed, garnet, pokeberry, pigeon berry, inkberry

Family

Phytolaccaceae (Pokeweed family)

Life Span

Perennial

Distribution and Habitat

Common pokeweed is native to North America. It is commonly found from Maine to Florida and as far west as Texas to New Mexico and Arizona (USDA-NRCS 2019). It is commonly found in wooded areas, pastures, fence rows, crop fields, areas under power lines, old fields, and other similar areas. In landscapes it is often seen in planting beds or bordering wooded areas. It can be considered a garden or yard weed but can be an important wildlife food source. The widespread distribution of common pokeweed is due to wild birds that are known to consume pokeberries, the fruit of the common pokeweed. Additionally, it seeds itself easily and grows well in average to medium moisture in well-drained soil under full or part shade.

Biology

Pokeweed is a herbaceous perennial plant that can grow 4 to 10 feet high (Figure 2). In optimal conditions, the plant can grow up to 21 feet tall, but it is usually found growing much smaller. Pokeweed flowers in the warm weather in Florida starting from July to September (Stephens 2018). The fruits are green when immature and turn into purple berries once matured (Figure 1). The berries mature in late summer to fall and attract a range of birds.



Figure 1. Green immature and purple mature fruits of common pokeweed.

Credit: Annette Chandler, UF/IFAS

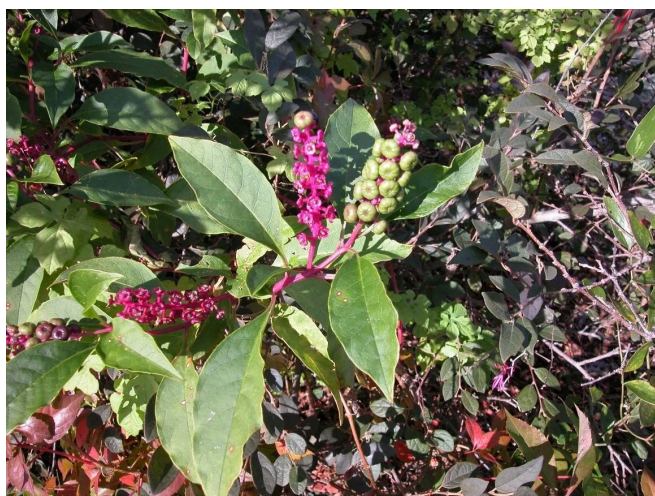


Figure 2. Common pokeweed.

Credit: Annette Chandler, UF/IFAS

Toxicity

The entire plant is poisonous, and depending on the quantity of plant consumed, it can even cause death in rare cases. It is largely toxic to cattle, sheep, poultry, horses, dogs, and humans (Barnett 1975). All parts of the plant contain alkaloids, such as saponins, oxalates, and phytolaccine, which are toxic. Pokeweed can produce over 48,000 seeds per plant, with the highest concentration of toxin present in the seeds and roots of the plant.

More information on pokeweed biology, identification, and control can be found in the EDIS publication [Common Pokeweed](#).

Wild Garlic (*Allium canadense*)

Other Common Names

Meadow garlic, wild onion, Canadian garlic, and Canada onion

Family

Amaryllidaceae

Life Span

Perennial

Distribution and Habitat

Wild garlic is native to North America and commonly found in the entire eastern half of the United States, ranging from Florida to Canada (USDA-NRCS 2022). *Allium canadense* L. var. *canadense* and *Allium canadense* var. *mobile* are two varieties of *Allium canadense* native to Florida (Wunderlin 2022). It is normally found growing in disturbed areas, open fields, ditches, roadways, home lawns, and gardens. The plant commonly spreads through bulb offsets and aerial bulbs.

Biology

Wild garlic is a grasslike perennial plant that can grow about 18 inches tall (Figure 4). Wild garlic has a strong onion-like odor when leaves are crushed or mowed. The flowers are a cluster of star-shaped pink or white colors and bloom from spring to summer (Figure 3).



Figure 3. Star-shaped flowers of wild garlic.

Credit: Karan A. Rawlins, University of Georgia, Bugwood.org



Figure 4. Grasslike wild garlic leaves.

Credit: Ohio State Weed Lab, The Ohio State University, Bugwood.org

Toxicity

Dogs, cats, and cattle are highly susceptible to *Allium* toxicity. The common symptoms include vomiting, diarrhea, abdominal pain, muscle weakness, and rapid heart rate. Eating a large amount of this plant has resulted in death in a few cases, but it is rare for animals to eat the plant excessively if other food sources are present. The toxic chemical called N-propyl disulfide results in hemolysis (rupture of red blood cells) in livestock (Cope 2005). Other closely related *Allium* spp., such as onion grass (*Allium vineale*), onion (*Allium cepa*), garlic (*Allium sativum*), leek (*Allium porrum*), and chives (*Allium schoenoprasum*), have a similar effect on dogs, cats, and cattle.

Bitter Sneezeweed (*Helenium amarum*)

Other Common Names

Yellow sneezeweed, bitterweed, yellow bitterweed, slender-leaved sneezeweed, yellow dogfennel

Family

Asteraceae (Aster family)

Life Span

Annual

Distribution and Habitat

Bitter sneezeweed is an herbaceous annual plant native to North America. It is primarily found growing in sandy soil ranging from Florida, Virginia, Missouri, Kansas, and Texas. It is commonly found in disturbed areas, pastures, sandy ground, railroad tracks, backyards, and in some cases home gardens. It can be used as a plant in pollinator gardens because it attracts bees and butterflies, which frequently visit the plant while in

flower. It grows best in subtropical temperatures and dry soil, but it can adapt to different soil conditions.

Biology

Bitter sneezeweed is a summer annual that grows up to 24 inches tall (Figure 5). The flowers bloom from August to October with few blooms occurring in warm, mild winter climates (Figure 6). It reproduces through seeds and is primarily dispersed by wind and animals. It is a fast-growing species and produces mature seeds in as little as eight weeks following germination.



Figure 5. Bitter sneezeweed.

Credit: James H. Miller & Ted Bodner, Southern Weed Science Society, Bugwood.org



Figure 6. Bitter sneezeweed blooming.
Credit: John D. Byrd, Mississippi State University, Bugwood.org

Toxicity

Bitter sneezeweed is primarily a concern for grazing animals because it is poisonous to sheep, cattle, horses, and goats (Kingsbury 1964). However, it has also been reported as being toxic to humans and some pets (Trull n.d.). The toxic chemicals present in bitter sneezeweed is a glucoside, dugaldin, and phenol. The plant retains its toxicity even after drying and can be a problem in contaminated hay. In many cases, it causes vomiting, which can develop into inhalation pneumonia. Other symptoms consist of digestive disturbances, neurological problems, dullness, trembling, and weakness. The common name bitterweed is because it causes milk to taste bitter when cows graze on the foliage.

Air Potato (*Dioscorea bulbifera*)

Other Common Names

Air potato, air potato vine, air yam, bitter yam, aerial yam, air yam

Family

Dioscoreaceae

Life Span

Perennial vine

Distribution and Habitat

Air potato is native to tropical Asia and sub-Saharan Africa. It was recognized as a category 1 invasive plant by the Florida Invasive Species Council in 1993 and also added to the Florida Noxious Weed List by the Florida Department of Agriculture and Consumer Services in 1999 (Enloe and Langeland 2021). It can be found growing in moist forests, disturbed areas, urban forests, forest edges, ruderal areas, and along roadsides. In tropical hammocks, it is seen heavily concentrated in

canopy gaps. It is a common invasive plant in residential landscapes because it often grows on the edges of wooded areas or up trees growing in the landscape.

Biology

Air potato is an aggressive herbaceous perennial vine that can grow up to 60 feet in length (Figure 7). It is highly invasive because it can reproduce sexually via seeds and vegetatively by underground or aerial tubers (Figure 8). Flowers are small, fragrant, and white or pinkish colored, but the plant rarely flowers in Florida. It prefers to grow in areas with high temperatures, high humidity, and high rainfall. The plant grows best in loamy soil with good drainage, but it does not tolerate salty or frost conditions well.



Figure 7. Air potato vines.
Credit: Annette Chandler, UF/IFAS



Figure 8. Aerial tuber of air potato.
Credit: Karen Brown, University of Florida, Bugwood.org

Toxicity

Air potato is poisonous to humans. It has been shown to cause severe liver injury or impairment of liver function, also known as hepatotoxicity (Guan et al.

2017). The main toxic component present in both underground tubers and aerial bulbils is a steroid diosgenin that can damage the liver. A detailed guide to the identification and management of this species is available in the article [Invasive Plants in Natural Areas: Air Potato](#).

Balsam Pear (*Momordica charantia*)

Other Common Names

Bittermelon, bitter gourd

Family

Cucurbitaceae

Life Span

Annual

Distribution and Habitat

Balsam pear is native to subtropical regions of Africa and Asia (Englberger 2009) but is now widely distributed throughout tropical and subtropical regions throughout the world. In Florida, balsam pear is mostly found in central and south Florida. It is a common weed in agricultural fields and in landscapes, mostly growing in landscape planting beds where it grows up and/or over ornamentals and small trees (Holm et al. 1997).

Biology

Balsam pear is a fast-growing summer annual vine (Figure 9) with a central taproot that can grow over 20 feet in length and is highly branched. In Florida, it typically begins germinating in late spring through summer in central Florida but can germinate almost year-round in south Florida. Flowering can begin as early as 30 days after seed germination. Fruits are egg-shaped and covered with ridges and warts. They are first green but then turn orange at maturity and split open, revealing bright red arils (seed covering) that cover the seeds (Figure 10).



Figure 9. Balsam pear vines with yellow flowers.
Credit: Annette Chandler, UF/IFAS



Figure 10. Balsam pear fruit split open.
Credit: Annette Chandler, UF/IFAS

Toxicity

Balsam pear is widely cultivated in tropical and subtropical regions around the world as a food crop and due to its many medicinal uses and reported health benefits (Basch et al. 2003). The red arils surrounding the seed and green fruit are reportedly edible, as well as other parts of the plant if cooked, but the seeds (if swallowed) and ripe orange fruit can potentially make people and pets very ill if swallowed (Walters and Decker-Walters 1988).

Chinese Wisteria (*Wisteria sinensis*)

Other Common Names

Chinese wisteria

Family

Fabaceae (Legume family)

Life Span

Perennial vine

Distribution and Habitat

Chinese wisteria, as the name suggests, is native to China. In North America, it is naturalized from Maine to

Florida and as far west as Arkansas. It is listed as a category 2 invasive plant by the Florida Invasive Species Council (Wunderlin 2022). Chinese wisteria grows along roadsides, forest edges, old house sites, and abandoned gardens. It is a problem in natural areas because it can climb into the canopy of trees or plants, eventually shading and damaging native plants.

Biology

Chinese wisteria is an aggressive perennial woody vine. It can grow as tall as the height of the plant it is climbing and can be more than 65 feet in length. It reproduces by rooting at each node, through stolons (underground runners), and vegetatively from cut stem pieces. Chinese wisteria blooms from March to early April. The flowers are showy, dangling, fragrant, and blue to violet in color (Figure 11).



Figure 11. Flower of Chinese wisteria.
Credit: Chris Evans, University of Illinois, Bugwood.org

Toxicity

Chinese wisteria is toxic to both humans and pets (Kayalvizhi et al. 2020). Every part of the plant contains a glycoside toxic compound called wisterin. The symptoms range from stomach pain, burning sensation

in the mouth, vomiting, and diarrhea. The pods and seeds have the highest concentration of wisterin.

Creeping Indigo (*Indigofera spicata*)

Other Common Names

Trailing indigo

Family

Fabaceae (Legume family)

Life Span

Perennial herb

Distribution and Habitat

Creeping indigo is native to Africa and southeastern Asia. Creeping indigo was introduced in Florida around 1925 as a potential forage crop for the livestock industry. It is generally found in disturbed grasslands, open fields, pastures, cultivated areas, gardens, and lawns. It thrives in clay soil but can tolerate and adapt to a range of soil types, including limestone, sandy, low-nutrient, and phosphorus-deficient soils.

Biology

Creeping indigo is a perennial prostrate creeping herb (Figure 12). The stems can grow up to 6 feet long and form roots at each node. The plant can reproduce by seed and stem cuttings (Figure 13). The plant flowers during the warm months and produces pink flowers on spikes from the bases of the leaves.



Figure 12. Creeping indigo crawling on landscape fabric.
Credit: Annette Chandler, UF/IFAS



Figure 13. Creeping indigo fruit.
Credit: Annette Chandler, UF/IFAS

Toxicity

Creeping indigo is toxic to livestock and is of particular concern for horses. The leaves and seeds of the plant contain a toxic amino acid called indospicine, which is toxic to the liver. High intake of the plant has been associated with a fatal central nervous system disturbance in horses. Symptoms include weight loss, high heart and respiratory rates, labored breathing, high temperature, and hypersalivation, or foaming from the mouth. Dogs do not typically eat the plant but are reportedly highly susceptible to indospicine toxicity, with secondary poisonings being reported in dogs eating indospicine-contaminated meat (Gardner and Riet-Correa 2011).

A detailed guide to the identification and management of this species is available in the article [Creeping Indigo, a Poisonous Plant of Concern in Florida Pastures](#).

Chinaberry (*Melia azedarach*)

Other Common Names

Cape lilac

Family

Meliaceae

Life Span

Perennial tree or small shrub

Distribution and Habitat

Chinaberry is native to southeastern Asia but has been cultivated throughout the world as an ornamental (Waggy 2009). It is highly invasive in Florida, categorized as a category 2 invasive by the Florida Invasive Species Council and has naturalized in many subtropical regions in the world. It can be found growing throughout all parts of Florida and is primarily a concern in natural areas, where it can form dense

thickets and outcompete native vegetation. Because it was once used as an ornamental plant, it is often seen growing in wooded areas of residential neighborhoods or may be found growing as a shade tree in some landscapes. It is highly tolerant of a wide range of soil conditions, and its seeds are dispersed by wildlife, primarily birds.

Biology

Chinaberry is a fast-growing deciduous to semievergreen tree or shrublike plant (Figure 14) (particularly after being cut or damaged) that can grow up to 50 feet in height, although it is often observed growing much smaller in residential landscape situations. It flowers from early spring through early summer, and fruits ripen during the fall and winter months (Figure 15) (Waggy 2009).



Figure 14. Chinaberry leaves.
Credit: Annette Chandler, UF/IFAS



Figure 15. Dry fruits of chinaberry.

Credit: John Rutger, University of Georgia, Bugwood.org

Toxicity

Flowers can cause respiratory irritation, and the leaves, bark, flowers, and fruit are poisonous, with poisonings from fruit ingestion being reported in people, sheep, cattle, and dogs. Most poisonings occur when fruit are eaten. Symptoms reported include burning of the mouth and throat, vomiting, and stomach pain (Phua et al. 2010).

Virginia Creeper (*Parthenocissus quinquefolia*)

Other Common Names

Woodbine, thicket creeper, five-leaved ivy

Family

Vitaceae (Grape family)

Life Span

Perennial vine

Distribution and Habitat

Virginia creeper is native to North America and widely distributed throughout the eastern United States with a range as far west as Nebraska, south to Florida, and north to parts of Canada (USDA-NRCS 2022). It has been vouchered in almost all counties in Florida (Wunderlin et al. 2022). It grows in a wide variety of soil types but grows best in moist soils. It is shade tolerant but can grow in full sun and is often found growing along forest edges. In landscapes, it is commonly found in planting beds or growing under the canopy of shade trees, along fences, and in other disturbed sites.

Biology

Virginia creeper is a deciduous to semievergreen vine (Figure 16) that spreads primarily via seed but can root along nodes if growing along the ground. It is a climbing vine that uses tendrils to grow up to 60 feet in height.

Seeds begin to germinate in spring, flowering occurs in summer, typically in June to July, and fruit ripen throughout the fall (Figure 17). It can be an important wildlife food because birds and other animals eat the fruit and can use the foliage and thick growth habit as cover (Colandoanto 1991).



Figure 16. Virginia creeper leaves.

Credit: Annette Chandler, UF/IFAS



Figure 17. Virginia creeper flowers.

Credit: Annette Chandler, UF/IFAS

Toxicity

While Virginia creeper is a native plant and serves as a wildlife food source, it is highly toxic to children and pets due to the presence of oxalates and other possible compounds that can cause gastrointestinal problems in children eating the leaves or the attractive berries. Symptoms of toxicity are typically excessive salivation and vomiting. Poisonings to various pets have also been reported (CSU 2021).

American Black Nightshade (*Solanum americanum*)

Other Common Names

American nightshade, black nightshade, common nightshade, garden nightshade, glossy nightshade, ink-berry nightshade, purple nightshade, small-flowered nightshade.

Family

Solanaceae (Nightshade family)

Life Span

Annual or short-lived perennial

Distribution and Habitat

American black nightshade is native to North and South America. The species is widely distributed in Florida. They are commonly found in the forest, grasslands, cultivated gardens, crop fields, and wastelands. The plants thrive in full sun and moist soil but can tolerate partial shade. It is a common weed in vegetable fields and gardens.

Biology

American black nightshade is an erect herbaceous plant that is an annual or short-lived perennial (Figure 18). The plant can grow to a height of 48 inches under optimum conditions. It is one of the most problematic species in the nightshade family. The flowers bloom from March through October. The flowers are star-shaped, usually white, and grow in clusters. The mature fruit of the plant is dull, black, or purplish-black color berries that are about 5 to 8 mm in diameter (Figure 19). It is easily propagated by the dispersal of seeds.



Figure 18. Leaves of American black nightshade.

Credit: Annette Chandler, UF/IFAS



Figure 19. White flowers and black berries of American black nightshade.

Credit: Annette Chandler, UF/IFAS

Toxicity

All parts of the plants are toxic to humans and pets. The plant contains a toxic compound called solanine. The leaves and berries are the most toxic part of the plant (Milner et al. 2011). The symptoms include gastrointestinal problems, weakness, hallucinations, and it may even cause death if enough is eaten. Other similar species such as *Solanum nigrum* and *Solanum carolinense* are also toxic to humans and livestock.

A detailed guide to the identification and management of this species is available in the article [Biology and Management of American Black Nightshade](#).

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